
Orchidaceae Dunstervillorum VI: New Pleurothallidinae from the Venezuelan Guayana

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ABSTRACT. The following two taxa are proposed as new: *Pleurothallis erebatensis* and *Trichosalpinx oxychilos*. Both species are illustrated with plates by the late G. C. K. Dunsterville. Comments are provided on their relationships.

During preparation of the treatment of the Orchidaceae for the *Flora of the Venezuelan Guayana*, we have detected the following undescribed taxa in the subtribe Pleurothallidinae.

Pleurothallis erebatensis Carnevali & G. Romero, sp. nov. TYPE: Venezuela. Bolívar: Municipio Sucre, alrededores de Santa María de Erebató, 4°59'N, 64°49'W, 360 m, feb. 1989, *Elio Sanoja* 2554 (holotype, PORT; isotypes, MO, VEN). Figure 1.

Species haec *P. aphtosae* Lindley affinis, sed planta minore, ovario glabro, sepalis extus conspicue carinatis, minute papillosis non conspicue pubescentibus, intus glabrescentibus non verruculosus, dorsali base non attenuato, synsepalo versus apicem connatis, labello angustiore discrepat.

Epiphytic herbs, caespitose to shortly creeping, erect to subpendent; rhizome covered with scarious sheaths. Stems (1.5–)3–8.5 cm long, terete, the basal $\frac{1}{3}$ – $\frac{1}{2}$ clothed in a close-fitting tubular brown sheath. Leaves 5.5–9.5 cm long, (1–)1.3–1.8(–2) cm wide, fleshy-coriaceous when fresh, coriaceous when dry, erect on the stem, narrowly elliptic to oblanceolate, apex obtuse to acute, the midnerve sulcate, dorsally angled. Inflorescences 5–10 mm long, 1–5, successive or 2 or 3 simultaneously, erect or deflexed downward; peduncle very short and completely covered by a sheath at the base of the leaf; rachis completely covered by the floral bracts, 4–

7-flowered; floral bracts ca. 2 mm long, fleshy, broadly cupuliform, apex acute, dorsally carinate. Flowers resupinate or not, dark brownish red, opening \pm simultaneously; pedicel 0.9–1.1 mm long, terete, ovary 1.2–1.5 mm long, glabrous, terete. Sepals thick-fleshy, 3-nerved, dorsally prominently carinate, finely papillose on both surfaces but more conspicuously so without, apices sharply mucronate; dorsal sepal 4.8–5 mm long, 1.8–2 mm wide, concave, oblong to elliptic-oblanceolate when flattened, acute, forming a hood over the column; lateral sepals connate for $\frac{5}{6}$ of their length into a concave synsepal 4.9–5.1 mm long, when spread 4.3–4.4 mm wide, basally produced into a prominent mentum. Petals 2.4–2.6 mm long, 0.9–1.1 mm wide, thin but fleshy, 1-nerved, oblanceolate to obtrullate, obtuse, margins in the apical half finely and irregularly erose, glabrous. Labellum 3–3.2 mm long, 1–1.1 mm wide in natural shape, 1.5 mm wide when flattened, 3-nerved, concave, narrowly oblanceolate in natural shape, becoming oblong-elliptic to elliptic when spread, rounded to obtuse, fleshy, thicker at middle, basally with a pair of minute, retrorse lobules, anterior margin erose-laciniate; disk covered with pubescence of hairs in transverse lamellalike rows, coarser in the apical half; callus composed of 2 submarginal, parallel keels with erose dentate margins, located in the middle $\frac{1}{3}$ of the labellum. Column 1–1.3 mm long, straight or \pm arcuate; margins prominently winged, apically 3-lobed, basally produced into a conspicuous foot 1–1.3 mm long. Fruits 0.9–1.3 mm long, obliquely ellipsoid. (Subg. *Acianthera* (Scheidweiler) Luer, sect. *Brachystachyae* Lindley.)

Pleurothallis erebatensis resembles several others in section *Brachystachyae*, and it is difficult to

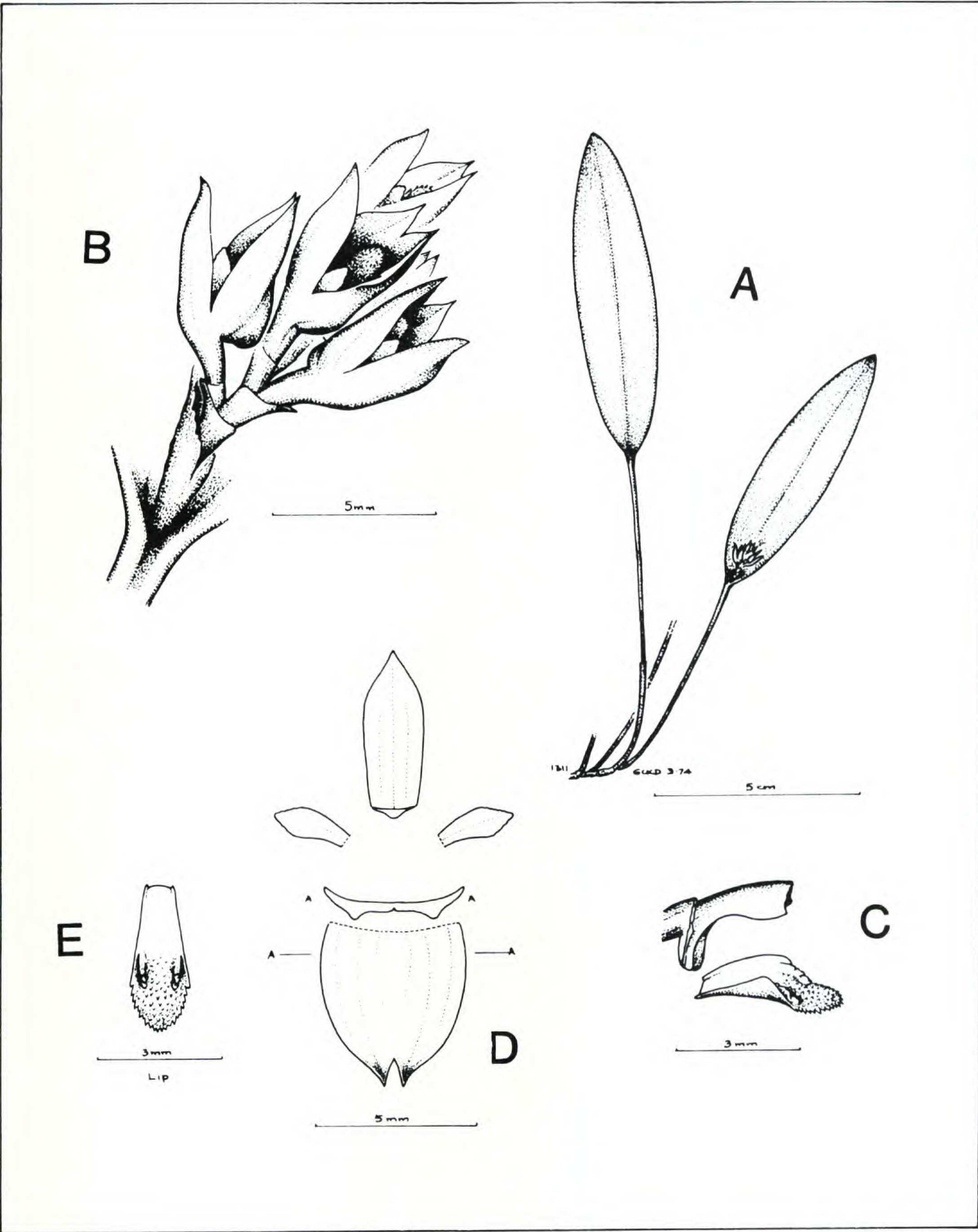


Figure 1. *Pleurothallis erebatensis* Carnevali & G. Romero. — A. Flowering habit. — B. Inflorescence. — C. Lateral view of labellum and column. — D. Sepals and petals, spread. — E. Labellum, spread. (Based on *Dunsterville & Dunsterville 1311.*)

ascertain which is its closest relative. It is similar to *Pleurothallis aphtosa* Lindley, from Colombia, Bolivia, Paraguay, and southern Brazil, from which it is easily distinguished by its smaller vegetative and floral stature, its conspicuously dorsally carinate se-

pals that are papillose without and glabrescent within (pubescent without and verruculose within in *P. aphtosa*), the synsepal connate almost to the apex, and a narrower labellum. The collectors of the new species have not described the fragrance of the

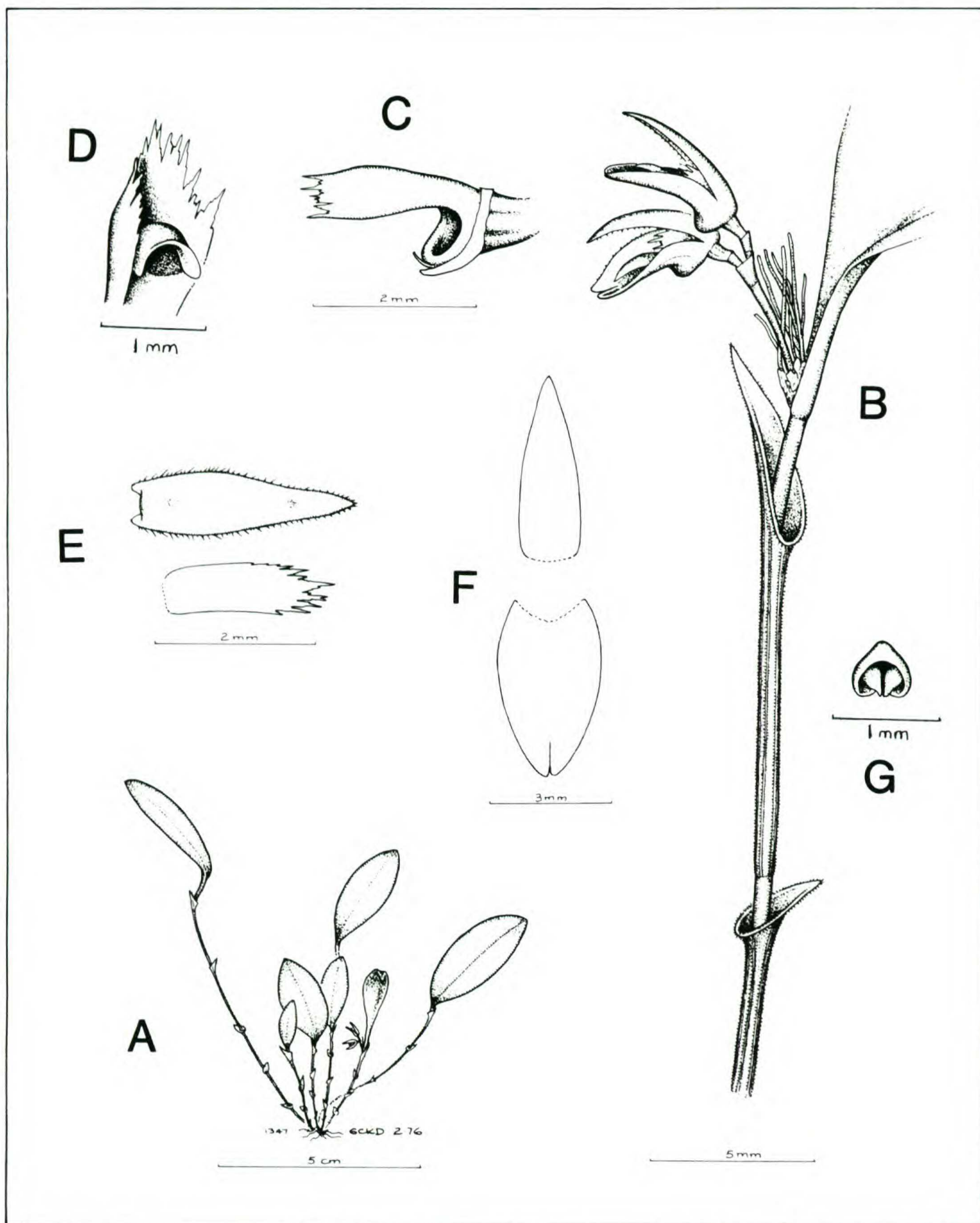


Figure 2. *Trichosalpinx oxychilos* Carnevali & G. Romero. —A. Habit. —B. Detail of stem, base of leaf and inflorescence. —C. Lateral view of column. —D. Clinandrium. —E. Labellum and petal. —F. Sepals, spread. —G. Anther and pollinia. (Based on *Dunsterville & Dunsterville 1347.*)

flowers, but it is likely to be similar to that of *Pleurothallis aphtosa*. A plant illustrated as *P. aphtosa* from Bolivia (*Vazquez 177*, Herbarium Vasquezianum, Dodson & Vázquez, 1990, t. 276) is most likely a variant of *Pleurothallis erebatensis*.

Paratypes. VENEZUELA. BOLIVAR: vic. of Sta. María de Erebató, 400 m, Mar. 1974, *Dunsterville & Dunsterville 1311* (AMES). TACHIRA: 10 km E of La Fundación, around Represa Dorada, 600–1,000 m, 10–13 Mar. 1981, *Liesner & González 10257* (VEN), *Liesner & González 10400* (MO, VEN).

Trichosalpinx oxychilos Carnevali & G. Romero, sp. nov. TYPE: Venezuela. Bolívar: Cerro Jaua, ca. 1,800 m, Feb. 1976, *G. C. K. Dunsterville & E. Dunsterville 1347* (holotype, AMES). Figure 2.

Species haec *Trichosalpingi orbiculari* (Lindley) Luer affinis sed foliis angustioribus subpetiolatis, sepalis lateralibus alte connatis ($\frac{2}{3}$ vs. $\frac{1}{4}$ – $\frac{1}{2}$ longitudine) recedit.

Epiphytic herbs, caespitose, 7–11 cm tall. Rhizome abbreviated. Stems 2.5–7.5 cm long, erect, terete, laxly enveloped by 4 or 5 lepanthiform sheaths; sheaths close-fitting, tubular, nervose, hispidulous, the apex expanded, the uppermost sheath generally elongate, less wide-spreading. Leaves 2.2–4 cm long, 0.75–1.4 cm wide, moderately fleshy, elliptic to narrowly elliptic, apex obtuse to broadly obtuse, base tapering, slender and twisted forming a channeled pseudopetiole 4–10 mm long. Inflorescences from stem apex, successive, 2-flowered, suberect, ca. 3.5 mm long; peduncle terete, slender, with a cupuliform sheath at apex; rachis very abbreviated. Flowers small, resupinate, suberect or horizontally patent, subcampanulate; floral bracts subhyaline, tubular, ca. 0.6 mm long; pedicel subterete, ca. 1.3 mm long; ovary obconic, 0.8–1.3 mm long. Sepals pale brown with red flushing yellow toward apex, concave, dorsal surface rugulose, margins sparsely ciliate or with short narrow teeth; dorsal sepal 4.3 mm long, 1.4 mm wide, narrowly lanceolate, acute, 3-nerved; lateral sepals connate for $\frac{2}{3}$ – $\frac{3}{4}$ of their length into a lanceolate or elliptic, obtuse synsepal, 4.4 mm long, 2.4 mm wide, basally produced into a pronounced mentum. Petals ca. 2 mm long, 0.5 mm wide, thin, translucent white, parallel to column, 1-nerved, oblong, apex long-lacerate. Labellum 2.3 mm long, 0.8 mm wide, red with yellow at apex and along the lightly sunken midnerve, articulate to and attached to the column

by a very short, narrow, thin lamina; blade 3-nerved, narrowly lanceolate, acute, margins ciliate, basally provided with 2 minute, retrorse, white lobules. Column ca. 2 mm long, white with some red at base, with a pronounced, fleshy foot; clinandrium long-lacerate; anther fleshy, white; pollinia 2, white, waxy; rostellum strongly hooded.

This new species belongs to a small complex within subgenus *Trichosalpinx*, characterized by an acute labellum that is longer than the petals. *Trichosalpinx oxychilos* seems to be most closely related to *T. orbicularis*, but differs in its narrower leaves and less spreading lateral sepals that are basally connate for $\frac{2}{3}$ – $\frac{3}{4}$ of their length. In addition, the ostia of the lepanthiform sheaths are less expanded in *T. oxychilos* than in *T. orbicularis*, and the margins of the sepals are ciliate in *T. oxychilos*, whereas in *T. orbicularis* they are glabrous or rarely provided with sparse, minute hairs. Both species seem to differ also in their ecological preferences, at least in the Venezuelan Guayana: *Trichosalpinx oxychilos* has been collected on summits of sandstone mesas at ca. 1,800 m, while *T. orbicularis* is basically a lowland species, known from elevations of 100–700(–900) m.

Acknowledgments. The Department of Graduate Studies of the Missouri Botanical Garden provided financial support. Roy Gereau, Bruce K. Holst, and Carlos Reynel carefully commented on earlier drafts of this article. Bruno Manara and John Dwyer reviewed the Latin descriptions. Carlyle A. Luer provided important discussion and verified the determinations; his input is gratefully acknowledged.

Literature Cited

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